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EGHAM

EGHAM URBAN DISTRICT COUNCIL

REPORT

OF

The Medical Officer of Health

FOR

The Year 1953

Egham Urban District Council

REPORT

TO THE URBAN DISTRICT COUNCIL OF

EGHAM, SURREY

FOR

THE YEAR ENDED DECEMBER 31st 1953

BY

C. A. McPHERSON, M.B., Ch.B., D.P.H., L.D.S., D.P.D.

Medical Officer of Health

To the Chairman and Members of the Egham Urban District Council :

Mr. Chairman, Ladies and Gentlemen,

It is my privilege to present the Annual Report on the state of the health of the district for 1953.

From the vital statistics, we find again a satisfactory state of affairs in that there were no maternal deaths, nor any from the commoner infectious diseases of childhood. The majority of cases notified during the year were of Measles, which now tends to present one of its characteristics of biennial periodicity, with a fair degree of regularity. As previously, diseases of the heart are responsible for the majority of cases of death, with increased figures for malignancy and affections of the central nervous system.

More children now are vaccinated against whooping cough, and there were again no cases of diphtheria. As regards diphtheria, it is essential to see that reinforcing injections are given in all cases about five years of age, and preferably again during school-life. Experience has shown that there can be no grounds for complacency in the absence of infection, as unless a relatively high level of protection exists and especially in the school and pre-school age groups, the disease can return to a community.

Progress of the work at the Experimental Tip has been fairly fully commented on in the main body of the Report. One unfortunate finding was that for all practical purposes, flies from both the Experimental and Egham's own refuse tip, were highly resistant, not only to Gammexane and D.D.T. powder, but a wide range of chlorinated hydro-carbons. A limited but useful method of fly-control on selected areas of the tip face was, therefore, brought to an end, and I must gratefully pay tribute to the help which the Department of Entomology of the London School of Hygiene gave us in coming to these conclusions.

On the question of housing, I must acknowledge the sympathetic way in which the Committee has made provision for the most necessitous of the applicants on medical grounds, and for the way in which it has appreciated the need of adequate housing for District Nurses in its area.

In conclusion, may I thank the Council and its Chief Officers for their help and consideration of all health problems, and the General Practitioners for their co-operation.

Finally, I would wish to record the efficiency and work of the Senior Sanitary Inspector and his staff.

I have the honour to be,

Your obedient servant,

C. A. McPHERSON,

Medical Officer of Health.

Egham Urban District Council

Public Health Staff :

Medical Officer of Health : C. A. McPHERSON, M.B.,
Ch.B., D.P.H., L.D.S., D.P.D.

(who is also the Medical Officer for the N.W. Division
of the County Council)

Senior Sanitary Inspector : F. G. BRITCHER, M.R.San.I.,
M.S.I.A., Certificate of the R.S.I.,
and S.I.E.J.B., Certified Meat
and Food Inspector.

Second Sanitary Inspector : R. I. SHEPHERD, M.R.San.I.,
M.S.I.A., Certificate of the R.S.I.,
and S.I.E.J.B., Certified Meat
and Food Inspector.

Third Sanitary Inspector : W. R. W. SHATTOCK, M.S.I.A.,
Certificate of the R.S.I. and
S.I.E.J.B.

Rodent Officer : A. E. SILVER.

Clerks : Miss D. WINGFIELD.

Miss A. STURT.

SECTION A STATISTICS

Area	...	...	...	...	...	9,350 acres
Registrar General's estimate of resident population mid-year 1953	...	...	...	...	...	25,800
Number of inhabited houses on 31st December, 1953						6,903
Rateable Value on 31st December, 1953	...				...	£268,397
Sum represented by a Penny Rate, 12 months end- ing 31st March, 1953	..	...	...	...		£1,079

EXTRACTS FROM VITAL STATISTICS

				Average for five years.		
				1953	1952	1948-1952
Population (Registrar General's estimate at mid-year)	...	...	...	25,800	25,410	24,882
Comparability Factors						
Births	...	...	...	0.98	1.07	—
Deaths	...	...	...	0.93	0.99	—
Live Births						
Legitimate	...	...	...	346	340	345.4
Illegitimate	...	...	...	16	18	16.2
Total	...	...	...	362	358	361.6
Birth Rates (per 1,000 population)						
Crude	...	...	...	14.03	14.09	14.53
Corrected	...	...	...	13.75	15.08	—
Still-Births						
Legitimate	...	...	...	6	7	6.6
Illegitimate	...	...	...	0	0	0.2
Total	...	...	...	6	7	6.8
Rate per 1,000 total live and still-births				16.30	19.18	18.46
Deaths	...	...	...	294	243	239.0
Death Rates (per 1,000 population)						
Crude	...	...	...	11.40	9.56	9.61
Corrected	...	...	...	10.60	9.46	—
Deaths from puerperal causes			...	0	0	0.2
Rate per 1,000 total live and still-births				—	—	0.54
Deaths of Infants under one year of age						
Legitimate	...	...	...	10	7	7.2
Illegitimate	...	...	...	0	0	0.8
Total	...	...	...	10	7	8.0
Death rate of Infants under one year of age						
All infants per 1,000 live births...				27.63	19.55	22.12
Legitimate infants per 1,000 legitimate live births	...	...	...	28.90	20.59	20.85
Illegitimate infants per 1,000 illegitimate live births			...	—	—	49.38

CAUSES OF DEATH (ALL AGES)
(Figures supplied by Registrar-General)

Causes of Death				Males	Females	Total
1.	Tuberculosis, respiratory	...	...	1	1	2
2.	Tuberculosis, other	...	...	—	—	—
3.	Syphilitic disease	...	...	1	—	1
4.	Diphtheria	...	...	—	—	—
5.	Whooping Cough	...	...	—	—	—
6.	Meningococcal Infections	...	...	—	—	—
7.	Acute Poliomyelitis	...	...	—	—	—
8.	Measles	...	...	—	—	—
9.	Other infective and parasitic diseases...			—	—	—
10.	Malignant neoplasm stomach	...	...	1	—	1
11.	Malignant neoplasm, lung, bronchus...			5	2	7
12.	Malignant neoplasm, breast	...	...	—	3	3
13.	Malignant neoplasm, uterus	...	...	—	3	3
14.	Other malignant and lymphatic neoplasms	...	...	18	13	31
15.	Leukæmia, aleukæmia	...	...	—	—	—
16.	Diabetes	...	...	2	—	2
17.	Vascular lesions of nervous system	...	...	15	33	48
18.	Coronary disease, angina	...	...	27	15	42
19.	Hypertension with heart disease	...	...	2	1	3
20.	Other heart disease	...	...	31	37	68
21.	Other circulatory disease	...	...	6	4	10
22.	Influenza	...	...	1	1	2
23.	Pneumonia	...	...	16	4	20
24.	Bronchitis	...	...	3	5	8
25.	Other diseases of respiratory system...			—	1	1
26.	Ulcer of stomach and duodenum	...	...	1	—	1
27.	Gastritis, enteritis and diarrhœa	...	...	2	—	2
28.	Nephritis and Nephrosis	...	...	—	—	—
29.	Hyperplasia of prostate	...	...	4	—	4
30.	Pregnancy, childbirth, abortion	...	...	—	—	—
31.	Congenital malformations	...	...	—	1	1
32.	Other defined and ill-defined diseases...			9	11	20
33.	Motor vehicle accidents	...	...	2	1	3
34.	All other accidents...	...	...	3	4	7
35.	Suicide	...	...	3	1	4
36.	Homicide and operations of war	...	...	—	—	—
Total from all causes				153	141	294

BIRTH RATES, DEATH RATES AND ANALYSIS OF MORTALITY DURING
THE YEAR 1953

	Rate per 1,000 Home Population		All Causes	Annual Death Rate per 1,000 Home Population							Rate per 1,000 Live Births		
	Live Births	Still Births		Typhoid and Para- typhoid Fevers	Whooping Cough	Diphtheria	Tuberculosis	Influenza	Smallpox	Acute Poliomyelitis and Polio-encephalitis	Pneumonia	Total Deaths under one year	Deaths from Diarrhoea and Enteritis (under 2 years)
England and Wales	15.5	0.35	11.4	0.00	0.01	0.00	0.20	0.16	0.00	0.01	0.55	26.8†	1.1
160 County Boroughs and Great Towns, in- cluding London ...	17.0	0.43	12.2	0.00	0.01	0.00	0.24	0.15	0.00	0.01	0.59	30.8	1.3
160 Smaller Towns (Resident Populations 25,000 to 50,000 at 1951 Census) ...	15.7	0.34	11.3	—	0.00	0.00	0.19	0.17	0.00	0.01	0.52	24.3	0.9
London ...	17.5	0.38	12.5	—	0.00	—	0.24	0.15	—	0.01	0.64	24.8	1.1
Egham ...	14.0	0.23	11.4	—	—	—	0.08	0.08	—	—	0.78	27.6	5.5

† Per 1,000 related live births

SECTION B

GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA

The Surrey County Council as the Local Health Authority is responsible for the Ambulance and Medical Transport Services.

Laboratory Facilities

Bacteriological and Chemical examinations of water are carried out by the Clinical Research Association Ltd., London.

Bacteriological examinations of milk, ice cream and water are undertaken at the Public Health Laboratories at Epsom or Guildford, together with such other specimens as need examination from time to time.

Biological examinations of milk are undertaken by the Public Health Laboratory at Reading.

Swabs and other clinical specimens are examined at the Public Health Laboratories at either Epsom, Guildford or Reading, or at St. Peter's Hospital, Chertsey.

Infectious Disease Cases

The Isolation Hospital, Ottershaw (telephone number : Ottershaw 327), is responsible for admitting cases of infectious disease from the district.

Home Nursing and Midwifery

The Surrey County Council with the good services of the District Nursing Association maintains five trained nurses who perform combined duties in the area. Their addresses are as follows :

R. Isherwood ...	52, Kingsley Avenue, Englefield Green	... Egham 282
K. Hall ...	5, Tempest Road, Egham	... Staines 4290
J. Thomas ...	6, Spring Rise, Egham	... Egham 306
K. Freeborn ...	32, Trumps Green Avenue, Virginia Water	... Wentworth 2133
G. M. West ...	1, Wapshot Road, Egham Hythe	... Staines 3456

Home Help Service

The County Council maintains from its Divisional Offices in Woking, a service for the provision of home helps in maternity cases, and for the purpose of giving assistance in homes when illness is present.

Clinics and other Treatment Centres

The Surrey County Council maintains school medical, antenatal, maternity and child welfare, immunisation, dental, reme-

dial exercises and speech defect clinics. These, in the main, are operated from the Drill Hall, Kings Road, Egham.

In addition, the Regional Hospital Board provides services for the Chest Physician and his clinic is held in these same premises.

Clinic Sessions are as follows :—

Clinic, Kings Road, Egham

(Telephone : Egham 341)

Ante-Natal	-	-	Every Monday	1.30-3 p.m.
School Dental :	Fillings and			
Inspections	...	...	Every Tuesday	9.30 a.m.-12
(by appointment only)	...	...	Every Thursday	1.30-4 p.m.
Gas Dental				
(by appointment only)	...	...	Every Thursday	9.30 a.m.-12
Dental, Expectant & Nursing Mothers & under 5's				
(by appointment only)	...	...	2nd & 4th Mondays in the month	2-4 p.m.
Diphtheria Immunisation	...	...	Every 2nd Wednesday in the month	9.30 a.m.-12
School Medical Clinic	...	...	Every Friday	9.30 a.m.-12
Infant Welfare Centre	...	...	Every Friday	2-4 p.m.
Eye Clinic				
(by appointment only)	...	...	2nd & 4th Mondays in the month	9.30 a.m.-12
Chest Clinic				
(by appointment only)	...	...	2nd Thursday in the month	2 p.m.
			4th Thursday in the month	2 p.m.
Pre-School Clinic for Toddlers				
(by appointment only)	...	...	1st Wednesday in the month	9.30 a.m.-12
Speech Defect Class (only by reference from S.M.O.)	...	...	Every Tuesday	9.30 a.m.-12 2-4 p.m.
Remedial Exercises Class	...	...	Every Wednesday	11 a.m.-12 2-4 p.m.

Methodist Hall, Victoria Street, Englefield Green

Infant Welfare Centre	Every Wednesday	2-4 p.m.
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Diphtheria Immunisation ... 1st Wednesday
in the month 10 a.m.-12

Trotsworth Hall, Station Approach, Virginia Water

Infant Welfare Centre ... Every Wednesday 2-4 p.m.

Methodist Hall, Wendover Road, Staines

Infant Welfare Centre ... Every Wednesday 2-4 p.m.

Day Nursery, Old Vicarage, Egham (Telephone No.: Egham 539)

The Surrey County Council maintains 20 places for children aged 0-5 years and applications and information in respect of admission may be obtained from the Matron.

The Divisional Medical Officer is responsible for the Divisionalised County Council services which are administered from 15, The Grove, Hersell, Woking (Telephone No.: Woking 3510).

National Assistance Act, 1948, Section 47

No case came within the scope of this Act during the year.

SECTION C

SANITARY CIRCUMSTANCES OF THE AREA

Water Supply

The South West Suburban Water Company supplies the greater part of the area and this supply has proved satisfactory during the year, both in quality and quantity. The joint scheme with two other local authorities also served by this company whereby monthly samples of water are taken by the authorities in rotation, and the results of the examinations circulated to each authority, has continued during the year. All the samples are taken of the water as supplied and each sample is submitted to both chemical and bacteriological examination. During the year twelve samples were taken, and in every case were satisfactory. B. Coli. was absent from 100 ml. throughout the year, except on one occasion when the probable number of B. Coli per 100 ml. was three, though these were not of faecal type.

Fifty-nine samples for bacteriological examination only were taken of the water supply at certain premises not supplied directly from the public mains. Of these twenty-three were reported as satisfactory, nine as suspicious and twenty-seven as unsatisfactory.

These samples were collected from thirty-five different properties. At eighteen of these the water was satisfactory. Five properties where the well water had been shown by sampling to be of unsatisfactory quality were provided during the year with a supply from the public main. In most of the remaining cases the degree of pollution was not great and in several of these its source was traced and eliminated.

In co-operation with the Surrey County Council's Chemist various samples were also taken from wells and lakes in the vicinity of a large experimental refuse tip, as a check on the effect that tipping operations were having upon the quality of the underground water.

Of the 6,903 dwelling houses in the area all but ninety are now supplied with main water. During the year 186 premises, many of them new buildings, have been connected to the Company's mains.

DRAINAGE AND SEWERAGE SCHEME

Sewage Disposal Works

These have continued to function satisfactorily throughout the year, and no major works have been necessary to the equipment.

Drainage and Sewerage

The sewerage system continues to operate satisfactorily. With the relaxation of building licensing several new private Estates in the district have been commenced and the laying of new sewers will mean a heavier load to be dealt with in the future.

Disposal of Cesspool Contents

With the exception of occasional loads from farm premises which were by arrangement with the owner discharged on to cultivated land, the cesspool emptiers continued to discharge their loads directly into the sewage disposal works at Chertsey, and this arrangement operated fairly satisfactorily throughout the year. The demand on the service continues to rise and with the easing of restrictions on building work which took place during the year, the development of certain unsewered areas began to proceed. It became obvious that this development would place such an additional load on the service that another vehicle would be required to meet it. An additional vehicle was purchased and came into operation in November, the fleet consisting now of three cesspool emptiers, together with a combined cesspool gulley emptier, the use of which is shared with the Highways Department. During the year forty-nine premises were added to the register, most of these being newly built properties,

During the year a total of approximately 3,122,000 gallons of sewage was removed by the cesspool emptiers as against 3,053,000 gallons in 1952, and 723,000 gallons in 1939. While this is not a very great increase for the whole year the increase from the new properties did not begin to take effect until the end of the year, and in December the service was running at a rate of about 3,500,000 gallons per year.

Rivers and Streams

No serious cases of pollution were noted during the year.

Closet Accommodation

The service introduced during 1949 for the emptying of pail closets in the Thorpe Ward once weekly by means of one of the cesspool emptiers specially equipped for the purpose continued throughout the year without complaint. The average number of premises served decreased slightly to 126.

PUBLIC CLEANSING

During the year the work of filling the Tip at Ten Acre Lane has continued at a high rate, and a further large area of water has been filled with the semi-inert refuse.

During the latter part of the year under review, the Council resolved to fill the remaining water before the Spring of 1954, and when this is completed all dangers from nuisance from water will have been removed.

The bulldozer continues to work satisfactorily, a new engine being fitted to this item of equipment during the year.

Approx. No. of bins, etc.	...	8,650
Approx. weekly quantity of refuse (excluding trade refuse)	...	300 tons
Particulars of salvage material collected	...	Scrap metal and rags Paper discontinued, Sept. 1953
No. of lorries	...	6

Employees

No. of Collectors (excluding drivers	...	17
No. of men at Pit (including foreman)	...	1

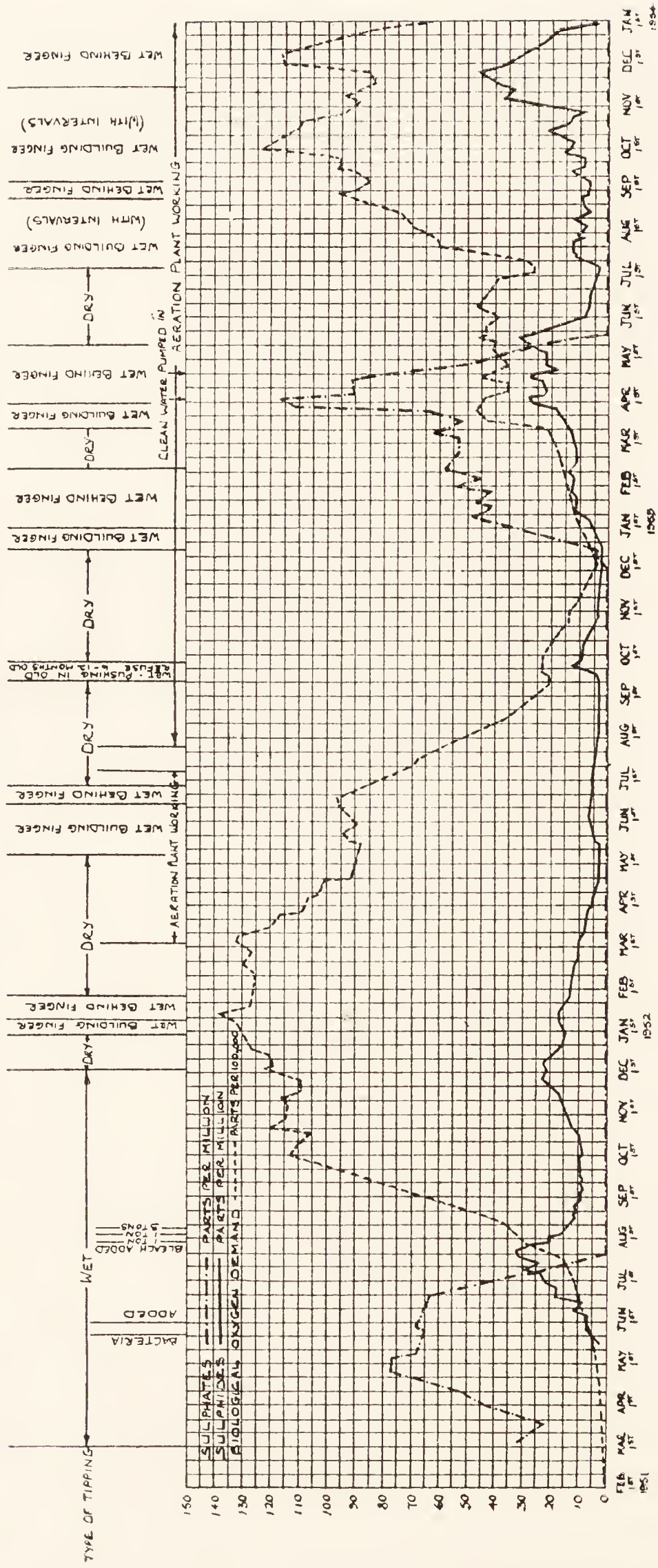
EGHAM EXPERIMENTAL REFUSE TIP

In my Annual Reports for the years of 1951 and 1952 I commented in some detail on the activities of the project of tipping household refuse into water. In order to obtain some degree of continuity in the sequence of events I should perhaps emphasise briefly the main points of the experiment.

From March 1st, 1951, a disused sand and gravel pit with approximately 25 million gallons of water commenced receiving a daily load of about 120 tons of household refuse. In six weeks' time oxygen in the water had disappeared, the B.O.D. stood at 2 parts per 100,000, but there were no complaints of smell until about the middle of May, in which month, and in June, solutions of chlorobia and chromatia bacteria were introduced in the hope that they would absorb and utilise any noxious smell in the form of hydrogen sulphide. These experiments were unsuccessful and with a gradual increase of sulphide in the water the smell was pronounced and objectionable, especially from June to August of that year, despite the addition of a quantity of bleaching powder to the water. After some improvement, in November with a rise in the sulphide content to about 22 parts per million a smell again became generalised and by about the end of December wet tipping was replaced by dry, which substantially continued until the middle of May, 1952. As from March, 1952, aeration of the water has been accepted as the method of choice for combating nuisance from excessive sulphide formation in the hope that by producing aerobic conditions the presence of sulphate in the water or its addition in the form of ash and rubble, would be rendered harmless, as under these circumstances, namely, the presence of oxygen, sulphate reducing organisms, which cause a sulphide smell, can no longer exist. As regards one of the most important aspects of supervision of the condition of subsoil water, its flow and the possibility of bacterial pollution, it seemed evident from repeated analyses of adjacent wells that these were but little, if at all, affected by activities of tipping, and the gravel purification of water was satisfactory. However, by making available main water extensions and its installation into several cottages, the possibility of chemical or bacteriological pollution of well-waters was safe-guarded. It seems that any excess of salt concentration in subsoil water has not been demonstrable at a distance greater than half a mile from the tip, and thereabouts a figure of 6 parts per 100,000 has represented the increase. During the greater part of 1952, therefore, dry tipping was mainly pursued by creating platforms or fingers extending into the water and combined with a partial degree of artificial oxygenation produced very nearly aerobic conditions, which one was hoping to see, by about the middle of December, when unfortunately, wet tipping was recommenced for four weeks.

At the commencement of 1953 a gradual rise of figures was seen in all directions in that sulphate, which was absent during al-

EGHAM EXPERIMENTAL TIP, PIT 8.



most the whole of 1952, presented 45 parts per million, sulphide 6 parts per million and the B.O.D. 90 parts per million. Despite the maintenance of dry tipping for the following three months, it will be seen from the graph that the rise continued, especially for the sulphate and B.O.D. figures, and in less degree with the sulphide. The necessity for a spell of wet tipping for three weeks in March precipitated events, which showed in early April a dangerously high build-up of sulphate of 117, a B.O.D. of 450 and a sulphide of 27, in terms of parts per million. With a smell of sulphide of hydrogen and a real potential nuisance in the high sulphate figure, about $3\frac{1}{2}$ million gallons of oxygenated water were pumped from a nearby pit into the existing tip water which, itself, had an estimated volume of 5 million gallons. Within four weeks the sulphate disappeared and with the maintenance of dry tipping until July, sulphide and B.O.D. figures improved. From this stage on, however, one was dealing with a rapidly diminishing volume of water and an increasing quantity of refuse, although probably devoid of large sulphate content. From now until the middle of December, the B.O.D. continued to rise with some remissions, sulphide smell was marked in the immediate vicinity of the tip, and the graph shows figures to account for this. At the end of December the readings were again—no sulphate a B.O.D. which had commenced a fall to 50 parts per million, and a sulphide of 12 parts per million. At this stage the need for artificial oxygenation was almost over and it was certain that with the increased rate of tipping of 750 tons per week, a few months would see a disappearance of the water level.

As in 1951 and 1952, the Senior Sanitary Inspector and his staff found it necessary to devote a very large portion of their time to frequent inspections at the tip to minimise the likely increase in fly, mosquito and cricket breeding, and in rodent control. Their problems have been many and difficult, but perhaps the most important was again the problem of dealing with the nuisance caused by floating refuse. As has been mentioned in previous Reports, for any large-scale operations of this nature, some measures in addition to the construction of a boom will have to be envisaged. It was unfortunate to find that quantities of adequate top soil could not usefully be employed as covering material on many occasions owing to the degree of steepness of the tip-face, and uncovered areas of recently deposited refuse soon became a source of fly-breeding. It will be remembered that in such circumstances it was previously customary to dust the surface with Gammexane, a powder highly toxic to many insects. During the course of the summer, however, its efficacy seemed in doubt and samples of flies and larvae from several points around both the experimental tip and Egham's own adjoining refuse area, were subjected to sensitivity tests. The results showed, by comparison with the normal non-resistant strain, that the flies were all about twelve times as resistant to D.D.T., eleven to Gammexane, 50 times to Alpha Chlordane, 22

times to Beta Chlordane and 33 times to Dieldrin and Aldrin. Insecticides generally were discontinued except in the case of crickets, when they seemed to be of value.

With the prospect of the completion of the experiment in the early months of 1954, therefore, it behoves us to reflect on what has been learned in the past years. Very soon six acres of dry land will have replaced 25 million gallons of water. In achieving this, 110,000 tons of refuse have been assimilated from other Local Authorities' areas. During several parts of the past years, an objectionable smell of hydrogen sulphide has been noticeable at a distance as far as two miles from the scene of tipping activity, although the strongest concentration ever recorded in the immediate vicinity of the tip was in July, 1951 one part of hydrogen sulphide to four million parts of air. During most of this immediate period the figure was less than one in twelve million parts. It would be difficult to try and assess the degree of nuisance caused by this odour. The early cheap and attractive attempt to utilize bacteria for combating the activity of their fellows does not appear to have been commenced either sufficiently early in the experiment or with a sufficient degree of standardisation to allow of any fair conclusions being drawn. The ultimate aim of maintaining aerobic conditions in water, which simultaneously receives a given quantity of household refuse, must still remain a subject of speculation, and especially as to whether it is possible to achieve this within reasonable bounds of expenditure. The variable behaviour of bacteria in reducing sulphate in water in the absence of oxygen would seem to postulate the need for further study of their activity in differing degrees of temperature at different water strata levels and in relation to various algal growths. The question of evolving ways and means of dealing with floating debris of all kinds must primarily be a mechanical and engineering problem capable of solution at a reasonable cost. With the maintenance of aerobic conditions in the water, the control of alternation between wet and dry tipping procedures should be such that it should not be necessary to create a tip-face of an angle which will not at all times receive adequate covering material, as this is felt to be the only satisfactory way of preventing the development of fly nuisances.

SANITARY INSPECTION

The following inspections were made during the year :—

Public Health Acts

Dwelling Houses ...	...	...	...	491
Moveable Dwellings	...	...	...	57
Infestations	...	...	...	116
Infectious Disease	...	...	...	73
Water Supply	...	...	...	268
Drainage and Sewerage	...	...	...	552
Refuse Collection and Disposal	...	...	...	251
Watercourses and Streams...	...	...	...	49
Keeping of Animals	...	...	...	40
Smoke Abatement	...	...	...	17
Miscellaneous	...	...	...	147

Housing Acts

Dwelling Houses	...	...	...	57
Miscellaneous	...	...	...	14

Food & Drugs Act, etc.

Dairies, Milkshops, etc.	...	...	...	11
Bakehouses	...	...	...	36
Other Food Premises	...	...	...	267
Food Inspections	...	...	...	133
Food Sampling	...	...	...	244
P.H. Meat Regulations	...	...	...	36

Egham U.D.C. Act

Hairdressers	...	...	...	14
Food Hawkers	..	...	...	51

Factories Acts

Factories	...	...	...	79
Outworkers	..	...	...	2

Shops Act

Petroleum Acts	...	...	...	205
Hackney Carriages	...	...	...	90
Rodent Control	..	...	...	25
Miscellaneous	...	...	...	4293
				136

TOTAL 7754

Action Taken

84 Informal Notices were served and 86 were complied with during the year.

13 Statutory Notices were served and 17 complied with during the year.

RODENT CONTROL

The scheme whereby a consolidated grant of 50% of the approved net expenditure incurred is refunded by the Ministry of Agriculture and Fisheries continued during the year on much the same lines as before. The staff engaged on this work remained at one Rodent Officer together with a Rodent Operator who spent part of his time on miscellaneous work in the department such as disinfection and disinfestation as and when required.

The following is a summary of work carried out during the year.

Number of properties inspected

(a)	As a result of complaints	...	310	
(b)	Otherwise	...	1186	
		Total		1496

Number of properties found to be infested

(a)	By rats	...	461	
(b)	By mice	...	67	
		Total		528

Number of infested properties treated ... 525

Number of "block control" schemes carried out
(2 or more premises treated jointly) ... 85

Number of infested properties reported to Agricultural Executive Committee ... —

Joint operations with neighbouring local authorities or Agricultural Executive Committee ... —

ERADICATION OF BED BUGS

(a)	Council Houses infested	...	1
	disinfested	...	1
(b)	Requisitioned premises infested	...	—
	disinfested	...	—
(c)	Private premises infested	...	5
	disinfested	...	5

Methods employed

Proprietary brands of insecticides incorporating either D.D.T. or Gammexane in a kerosene base were employed, spraying being carried out where necessary after redecoration in order that maximum use of the residual properties of the insecticide was ensured.

GENERAL INFESTATION CONTROL

Apart from bed bugs my department also dealt during the year

with the following infestations, using D.D.T., Gammexane or Pybuthrin preparations in the form of powder, liquid or smoke.

Cockroaches	...	...	13
Dried Currant Moths	..	..	1
Drug Store Beetles	...	...	1
Furniture Beetles	...	..	2
Hornets	..	...	3
House Flies	...	...	2
Wasps	...	...	37

THE FACTORIES ACTS, 1937 and 1948

Seventy-five Premises are on the register, viz. :—

Garages and motor repairers	...	...	19
Engineers other than the above	...	...	20
Bakehouses	...	...	8
Builders	...	...	8
Tailors, Dressmakers, Milliners, etc.	...	...	1
Miscellaneous Trades	...	...	19

Premises	No. on Register	Inspections	Written Notices	Occupiers Prosecuted
Factories with mechanical power...	67	75	3	—
Factories without mechanical power	6	2	—	—
Other Premises under the Act (including works of building and engineering construction but not including outworkers' premises)	2	2	—	—
TOTAL	75	79	3	—

Defects found

	Number of Cases in which Defects were found				Number of Cases in respect of which prosecutions were instituted
	Found	Remedied	Referred to H.M. Inspector	Referred by H.M. Inspector	
Want of Cleanliness (S.1)...	—	—	—	—	—
Overcrowding (S.2) ...	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—
Inadequate ventilation (S.4)	—	—	—	—	—
Ineffective drainage of floors (S.6) ...	—	—	—	—	—
Sanitary Conveniences (S.7)					
insufficient ...	—	—	—	—	—
unsuitable or defective...	6	6	—	2	—
not separate for sexes...	—	—	—	—	—
Other offences against the Act (not including offences relating to Outwork) ...	—	—	—	—	—
TOTAL	6	6	—	2	—

SMOKE ABATEMENT

No cases of serious atmospheric pollution arose during the year.

SWIMMING BATHS AND POOLS

There are in the area several privately owned open air swimming baths, but only one, at a hotel, is open to the general public. One sample from this bath was taken for bacteriological examination, the result being satisfactory.

SCHOOLS

There are six elementary, one secondary and seven private schools, together with a Special Subjects Centre. All these schools are served with the South West Suburban Water Company's main supply.

With the exception of the two elementary schools at Thorpe and Christchurch Road, Virginia Water, all are connected to the main drainage.

Thorpe Schools

These schools are served with pail closet and urinal accommodation. The latter is connected to a soakaway and the closets are emptied weekly by this Council's conveyance.

Christchurch School

This school continues to be served by pail closets. These are emptied by a part-time employee into a cesspool at the rear of the school. The cesspool requires very frequent emptying and it would be a great improvement if the redrainage of these premises to the public sewer could be arranged. The chief obstacle is of course the relatively high cost.

ELEMENTARY SCHOOLS

Milk supplied 1953

		On Roll Milk Roll		Grade	Per cent. on Milk Roll
Egham	Mixed	478	307	Pasteurised	64.2
	Infants	192	185	Pasteurised	96.4
Englefield Green	Mixed	490	339	Pasteurised	69.2
	Infants	239	230	Pasteurised	96.2
Egham Hythe	Boys	310	245	Pasteurised	79.0
	Girls	350	318	Pasteurised	90.9
	Infants	336	330	Pasteurised	98.2
St. Ann's Heath		161	135	Pasteurised	83.9
Christchurch		113	113	Pasteurised	100.0
Thorpe		79	35	Pasteurised	44.3
		<hr/> 2748	<hr/> 2237		<hr/> 81.4%

DIPHTHERIA IMMUNISATION

Two hundred and eighty-one children completed their primary course of immunisation during the year as follows :—

School children	...	7
Under fives	...	274
		<hr/>
Total		281
		<hr/>

In addition 186 children, previously immunised, received boosting doses.

The Ministry of Health agreed in January, 1950, to pay general practitioners a fee for notifying vaccination and immunisation, and during the year 127 such notifications were received for immunisations against Diphtheria, and 230 notifications for vaccinations. As from August, 1952, Whooping Cough became included under this scheme and 116 such notifications were received. In addition 253 children received a combined injection of Whooping Cough vaccine and Diphtheria prophylactic.

SITES FOR MOVEABLE DWELLINGS

There are now four main sites for moveable dwellings within the district.

(a) Anglers Rest Hotel Site

This site still houses a maximum of 50 moveable dwellings. The caravans on it are now mostly used for whole time occupation. The site is provided with a supply of main water to a standpipe, two blocks of water closets drained to the sewer, and a number of refuse bins which are emptied each week by the Council in the normal way. As mentioned in my report last year the proprietors are still endeavouring to restrict the use of the site to the summer months only, but many of the caravans on the site are the only homes of their occupiers and as they had nowhere to go when winter came on they again stayed on the site during the winter months at their own risk, the owners drawing no rents.

(b) Fishing Temple, Chertsey Lane

This site houses a maximum of 39 moveable dwellings mostly the better type of modern trailer caravan. Main water is supplied to standpipes, and there are water closets drained to a cesspool, though many of the caravanners use their own chemical closets; refuse bins are provided and are emptied each week by the Council.

(c) Glanty House Site

This site now holds a maximum of 60 caravans. The site is well maintained, and is provided with main water, water closets drained some to cesspools and some to the sewer, and refuse bins, the latter being emptied each week by the Council.

(d) Greenways Hotel Site

The use of this site limited to the housing of fourteen caravans continued during the year. Apart from a cesspool provided for the reception of waste water the occupiers continue to use the sanitary facilities provided in the hotel.

In addition to these four sites, other caravans are still stationed on individual sites in various parts of the district. During the year the use, for limited periods only, of 47 caravans on such sites was approved. Generally these caravans have their own chemical closets and most of them have a supply of main water on the site or have access to a supply from nearby.

HAIRDRESSERS

Under section 58 of the Egham Urban District Council Act, 1948, a total of twenty hairdressers or barbers are now registered; one new establishment was registered during the year.

SECTION D**HOUSING****1. Inspection of Dwelling-houses during the year :—**

(1)	(a)	Total number of dwelling houses, inspected for housing defects (under Public Health or Housing Acts)	100
	(b)	Number of Inspections made for the purpose	448
(2)	(a)	Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932	7
	(b)	Number of inspections made for the purpose	20
(3)		Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	1
(4)		Number of dwelling-houses (exclusive of those referred to under preceding sub-head) found not to be in all respects reasonably fit for human habitation	64

2. Remedy of Defects during the year without Service of Formal Notices :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers ...	65
---	----

3. Action under Statutory Powers during the year :—

A. Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936 :

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	—
(2) Number of dwelling-houses which were rendered fit after service of formal notices :	
(a) By Owners	3
(b) By Local Authority in default of Owners	—

B. Proceedings under Public Health Acts :

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied... ..	11
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :	
(a) By Owners	12
(b) By Local Authority in default of Owners	—

C. Proceedings under Sections 11 and 13 of the Housing Act, 1936 :

(1) Number of dwelling houses in respect of which Demolition Orders were made ...	2
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	5
(NOTE.—In addition 3 dwelling-houses were demolished as a result of informal action).	
(3) Number of dwelling-houses in respect of which an undertaking was received from the Owners	—
(4) Number of dwelling-houses in respect of which undertakings were determined, the dwelling-houses having been rendered fit...	—
(NOTE.—One undertaking was determined upon the demolition and rebuilding of a dwelling-house).	

D. Proceedings under Section 12 of the Housing Act, 1936 :

(1)	Number of separate tenements or under-ground rooms in respect of which Closing Orders were made	...	...	...	—
(2)	Number of separate tenements or under-ground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	...	...	...	--

4. Progress in Housing

(1)	Houses erected during the year :				
	(a)	by the local authority	...	...	118
	(b)	by private enterprise	...	...	69
(2)	Houses in course of construction at the end of the year :				
	(a)	by the local authority	...	...	89
	(b)	by private enterprise	...	...	91

5. Applications for Accommodation

There were 892 outstanding applications for Council houses at the end of the year. This figure is considerably less than that given last year. The reduction is largely due to a complete revision of all applications which was carried out during the year, when many were found to be no longer effective.

SECTION E

INSPECTION AND SUPERVISION OF FOOD

Food Premises

The food premises in the district may be analysed into the main type of businesses as follows :—

Grocers and General Provisions	...	...	56
Public Houses	...	...	38
Cafes	...	...	31
Confectioners (sweets)	...	...	28
Greengrocers	...	...	19
Bread and Cake Shops	...	...	17
Butchers	...	...	14
Off Licences	...	...	8
Wet Fish Shops	...	...	5
Fried Fish Shops	...	...	4
Restaurants	...	...	4
Dairies	...	...	2

A number of these are registered for special purposes in accordance with Section 14 of the Food and Drugs Act, 1938, as follows :—

Manufacture and Sale of Ice Cream

Confectioners (sweets)	I
Cafe	I
General Stores	I

Storage and Sale of Ice Cream—

Hotel	I
Confectioners	22
Factory Canteen	I
Greengrocers	3
Fishmonger	I
General Stores	28

Manufacture of Sausages 3

Manufacture of Sausages and Pickled Food ... 2

Manufacture of Sausages and Preserved Food ... I

Manufacture of Sausages and Potted, Pressed
Pickled and Preserved Food... .. I

Ice Cream

Apart from relatively small amounts made up from “complete cold mixes” all ice cream sold in the district is produced elsewhere, and the tendency for the production to be concentrated more and more into a few large firms continues.

During the year 128 samples of ice cream were collected for examination by the Methylene Blue Test, and the results are summarised below; five of the six samples placed in grade IV were obtained from an itinerant vendor, further reported upon later under the heading Food Hawkers.

Grade 1	Grade 2	Grade 3	Grade 4
85	26	11	6
(66.4%)	(20.3%)	(8.6%)	(4.7%)

Lollies

Five samples of lollies were taken and all gave satisfactory results.

Milk Supply

Two premises are registered under the Milk and Dairies Regulations, 1949, as “dairies.” Both are used by fairly large “distributors” and almost all the milk is received in bottle from depots outside this district.

The one pasteurising plant operating in the district which has been supervised by the Senior Sanitary Inspector, acting on behalf of the Surrey County Council, the licensing authority, ceased to operate very early in the year.

In December the Minister of Food issued an order under Section 23 of the Food and Drugs (Milk, Dairies and Artificial Cream) Act, 1950, which had the effect of making the district a Specified Area. The only two producer retailers remaining therefore had to make arrangements in order that they might comply with this Act ; one decided to give up the retail side of his business, this being taken over by a large concern, and the other made arrangements to buy in supplies of Pasteurised and Tuberculin Tested milk in bottles so that he could continue the retail side of his business. The milk produced on both of these farms now goes out of the district for pasteurisation.

The scheme whereby all supplies of milk intended for consumption without heat treatment are sampled quarterly for biological examination continued during the year. Eighteen samples were taken, all at farms, and all with negative results.

During the year 66 samples of milk were collected from the various retailers throughout the district for bacteriological examination ; the results are classified below.

				Pasteurised	T.T. Pasteurised	Tuberculin Tested	Sterilised	Ungraded	Total
No. of samples tested	...	...	...	32	12	7	4	11	66
Methylene Blue Test :									
Passed	...	...	...	32	12	7		10	61
Failed	...	...	...	—	—	—		1	1
Phosphatase Test :									
Passed	...	...	...	31	12				43
Failed	...	...	...	1	—				1
Turbidity Test :									
Passed	...	...	...				4		4
Failed	...	...	...				—		—

Licences

Under the Milk (Special Designation) (Raw Milk) Regulations, 1949, and the Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949, the following licences were issued :—

Dealers' Licences

Tuberculin Tested	...	...	...	4
Pasteurised	...	...	...	5
Sterilised	...	...	...	10

Supplementary Licences

Tuberculin Tested	...	...	...	4
Pasteurised	...	...	...	4
Sterilised	...	...	...	2

In addition, one pasteuriser's licence was issued by the Surrey County Council, as mentioned under the previous heading, but this was surrendered in February, the dairyman concerned having given up the business. He also surrendered his Dealers' licences issued by this Council.

Meat Inspection

Apart from emergencies and an occasional cottager's pig killed under permit, no slaughtering takes place in the district. Inspections of meat in the butchers' shops continued and where necessary certificates were given in respect of meat found to be unfit.

Food Inspection

Inspection of foodstuffs at shops and other premises continued as usual during the year, and certificates were issued in respect of the following items which were found to be unfit, and which were surrendered to the sanitary inspectors for destruction or salvage, or returned to the suppliers in accordance with instructions issued by the Ministry of Food.

Bacon	...	...	...	...	33 lbs.
Cheese	...	...	...	...	22 lbs. 1½ ozs.
Coconut, shredded	...	...	...	...	10 ozs.
Cream, canned	...	...	...	...	11 lbs. 2 ozs.
Fish	...	...	...	...	105 lbs. 4 ozs.
Fish, canned	...	...	...	...	8 lbs. 5¼ ozs.
Fish, shell	...	...	...	...	13 lbs.
Fruit, canned or bottled	...	...	...	...	293 lbs. 15½ ozs.
Fruit, dried	...	...	...	...	207 lbs.
Ham, cooked	...	...	...	...	4 lbs. 15 ozs.
Macaroni in Cheese	...	...	...	...	8 ozs.
Meat, canned, and Meat Preparations	...	...	...	...	181 lbs: 10¼ ozs.
Meat, fresh	...	...	...	...	449 lbs. 9 ozs.
Milk, canned	...	...	...	...	50 lbs. 1 oz.
Paste	...	...	...	...	6 ozs.
Preserves	...	...	...	...	4 lbs. 8 ozs.
Sausages	...	...	...	...	233 lbs. 8 ozs.
Soup, canned	...	...	...	...	3 lbs. 9 ozs.
Tomato and Fruit Juices, canned	...	...	...	...	4 lbs. 8½ ozs.
Vegetables, canned	...	...	...	...	52 lbs. 8 ozs.

With the exception of small amounts released for animal feeding all condemned food is disposed of by burying at the Council's refuse disposal tip, under the supervision of the sanitary inspectors.

Food and Drugs Act, 1938

The Food and Drugs authority for this district is the Surrey County Council. The following is a summary of the work done by that authority during the year.

Articles	Analysed			Adulterated or irregular			Prose- cutions	Con- victions
	Frml.	Infml.	Total	Frml.	Infml.	Total		
Almonds, Ground ...	I	—	I	—	—	—	—	—
Coffee and Chicory								
Essence	I	—	I	—	—	—	—	—
Ice Cream ...	6	—	6	—	—	—	—	—
Milk ...	5I	—	5I	—	—	—	—	—
Sausages ...	I	—	I	—	—	—	—	—
Soup ...	2	—	2	I	—	I	—	—
Totals ...	62	—	62	I	—	I	—	—

Food Hawkers

Under Section 65 of the Egham Urban District Council Act, 1948, all hawkers of food within the district are required to register themselves, and the premises used by them as storage accommodation for food, with the Council. During the year 4 applications were approved for registration, bringing the total registrations at the end of the year to 16 persons with premises in the district, and 27 with premises in other districts.

Following upon a series of adverse reports upon the quality of the ice cream sold and upon the condition of the water used for the rinsing of utensils, coupled with certain other unsatisfactory circumstances, action was taken towards the end of the year to revoke the registration of a hawker of food. This person had no premises within the district and purchased ice cream from a manufacturer whose premises are also outside the district. The Council finally revoked the registration, but an Appeal lodged was still awaiting hearing at the end of the year. The Appeal was finally heard on 3rd February, 1954, and was not allowed.

Legal Proceedings

No formal action was taken during the year.

SECTION F

Influenza

Two deaths have been reported from this disease during the year.

Pneumonia

Four cases of this disease were notified, one as "influenzal pneumonia."

Scarlet Fever

Thirty-eight cases were notified during the year of which four were admitted to Ottershaw Isolation Hospital. It is not nowadays generally necessary to admit such infections to a fever hospital and apart from the mildness of the condition itself it responds very satisfactorily to the newer forms of antibiotics which, such as penicillin, are nowadays more plentiful.

Diphtheria

No cases were notified during the year.

Measles

Three hundred and forty-three cases were notified. The greatest numbers occurred during the first four months of the year, and of these two were admitted to the Ottershaw Isolation Hospital. It is customary to admit this disease only when complications are present or when there are poor home conditions.

Whooping Cough

Twenty cases of this disease were notified, and of these three were admitted to the Ottershaw Isolation Hospital.

Acute Poliomyelitis (non-paralytic)

One case of this disease was notified during the year and admitted to Ottershaw Isolation Hospital.

Dysentery

Twenty-one cases of Bacillary Dysentery were notified, and of these two were admitted to Ottershaw Isolation Hospital. The majority occurred in a Residential Children's Nursery.

Food Poisoning

One case of this condition was notified.

Puerperal Pyrexia

One case was notified, and was admitted to King Edward VII Hospital, Windsor.

Other Diseases

Two cases of Chicken Pox were admitted to the Ottershaw Isolation Hospital.

The following non-notifiable conditions were brought to my notice by reports from Head Teachers :—

Chicken Pox	...	...	...	125
Conjunctivitis	...	...	...	4
German Measles	...	...	...	13
Glandular Fever	...	...	...	1
Influenza	...	...	...	12
Jaundice	...	...	...	2
Mumps	...	...	...	53
Tonsillitis	...	...	...	13

Tuberculosis

There were thirty-two cases added to the register during the year. Sixteen of these were transfers into the district, and sixteen were new cases occurring in the district. Twenty-two cases were removed from the register during the year, leaving at the end of the year a total of one hundred and ninety-one cases, 159 pulmonary and 32 non-pulmonary, a nett increase for the year of 10.

NEW CASES AND MORTALITY DURING 1953

Age Period	New Cases.				Deaths.			
	Respiratory		Non-Respiratory		Respiratory		Non-Respiratory	
	M.	F.	M.	F.	M.	F.	M.	F.
0—	...	—	—	—	—	—	—	—
1—	...	—	1	—	—	—	—	—
5—	...	—	—	—	—	—	—	—
15—	...	1	4	—	—	—	—	—
25—	...	1	1	—	—	1	—	—
35—	...	3	2	—	1	1	—	—
45—	...	2	—	—	—	—	—	—
55—	...	—	—	—	—	—	—	—
65 and upwards	...	1	—	—	1	—	—	—
TOTAL	...	8	8	—	2	2	—	—

Public Health (Prevention of Tuberculosis) Regulations, 1925

No action has been necessary under Public Health (Prevention of Tuberculosis) Regulations, 1925, or under Section 62 of the Public Health Act, 1925, or under Section 172 of the Public Health Act, 1936.

Disinfection

The rooms of 13 houses were sprayed or fumigated, following cases of infectious disease, the majority being in cases of Pulmonary Tuberculosis.

Cancer

Forty-five cases died from cancer during the year.—24 males and 21 females, being nine cases more than last year.

The age incidence of these 45 cases is as follows :—

	0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90
Males	1	—	—	1	3	3	4	10	2
Females	—	—	—	—	5	—	6	6	4

The place incidence as regards Wards is as follows :—

	Town	Egham Hythe	Englefield Green	Virginia Water	Thorpe
Males	5	10	6	3	—
Females	6	7	7	—	1

NOTIFIABLE DISEASES

Disease	Total Cases notified	Cases admitted to Hospital	Total Deaths
Smallpox	—	—	—
Scarlet Fever	38	4	—
Diphtheria	—	—	—
Enteric Fever (incl. Paratyphoid)	—	—	—
Puerperal Pyrexia	1	1	—
Pneumonia (acute primary or acute influenzal)	4	—	—*
Erysipelas	—	—	—
Other Diseases notifiable locally...	—	—	—
Ophthalmia Neonatorum	—	—	—
Encephalitis Lethargica	—	—	—
Continued Fever	—	—	—
Dysentery, Bacillary	21	2	—
Acute Polio-encephalitis	—	—	—
Acute Poliomyelitis, paralytic	—	—	—
Acute Poliomyelitis, non-paralytic	1	1	—
Malaria Induced	—	—	—
Cerebro-Spinal Fever	—	—	—
Whooping Cough	19	3	—
Measles	343	2	—
Food Poisoning	1	—	—

* During the year twenty cases of death were classified by the Registrar General as "Pneumonia." The majority occurred in elderly people.

INFECTIOUS DISEASES

NOTIFIABLE INFECTIOUS DISEASE. The number of cases during the past five years are as follows :—

			1949	1950	1951	1952	1953
Smallpox	...	...	—	—	—	—	—
Scarlet Fever	...	...	20	18	8	3	38
Diphtheria	...	...	1	—	—	—	—
Erysipelas	...	...	1	2	1	—	—
Enteric Fever	...	...	—	—	—	—	—
Puerperal Pyrexia		...	—	1	—	—	1
Cerebro Spinal Fever		...	—	—	—	—	—
Tuberculosis (Pulmonary)	...		19	20	14	13	16
Tuberculosis (Non-Pulmonary)			5	5	1	3	—
Measles	...	...	337	81	411	93	343
Whooping Cough...		...	35	52	40	18	19
Ophthalmia Neonatorum		...	—	—	—	—	—
Malaria	...	...	—	—	—	—	—
Pneumonia	...	...	1	—	2	1	4
Dysentery, Bacillary		...	—	2	1	20	21
Encephalitis Lethargica		...	—	—	—	—	—
Continued Fever	...	...	—	—	—	—	—
Acute Poliomyelitis, paralytic				2	1	—	—
Acute Poliomyelitis, non-paralytic			3	5	—	—	1
Acute Polio-encephalitis	...	...	1	—	—	—	—
Food Poisoning	...	...	—	7	—	—	1
TOTALS	...	...	423	195	479	151	444

NOTIFIABLE INFECTIOUS DISEASES—Classified in Wards.

WARDS	Scarlet Fever	Measles	Whooping Cough	Acute Poliomyelitis		Pneumonia	Dysentery	Food Poisoning	Puerperal Pyrexia	Pul. T.B.	Non-Pul. T.B.
				Paralytic	Non- Paralytic						
TOWN ...	14	70	1	—	—	2	3	1	—	6	—
EGHAM HYTHER ...	7	120	8	—	1	—	—	—	—	4	—
ENGLEFIELD GREEN	9	101	7	—	—	1	18	—	—	2	—
VIRGINIA WATER ...	6	40	1	—	—	1	—	—	—	2	—
THORPE ...	2	12	2	—	—	—	—	—	1	2	—
Totals ...	38	343	19	—	1	4	21	1	1	16	—

ANALYSIS OF TOTAL CASES DURING 1953 UNDER AGE GROUPS

	Under										65 and over	Total
	I	2	3	4	5-9	10-14	15-19	20-34	35-44	45-64		
Smallpox ...	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever ...	—	—	3	2	26	6	—	1	—	—	—	38
Diphtheria ...	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas ...	—	—	—	—	—	—	—	1	—	—	—	1
Puerperal Pyrexia ...	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever ...	—	—	—	—	—	—	1	2	—	—	—	21
Dysentery, bacillary ...	—	8	5	1	1	—	—	—	—	—	—	1
Food Poisoning... ..	—	—	—	—	—	—	—	1	—	2	1	4
Pneumonia ...	—	—	—	—	—	—	—	—	—	—	—	—
Ophthalmia Neonatorum	—	—	—	—	—	—	—	—	—	—	—	—
Continued Fever ...	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis Lethargica ...	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro Spinal Fever ...	—	—	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis, paralytic	—	—	—	—	—	—	—	—	—	—	—	—
Acute Poliomyelitis, non-paralytic	—	—	—	1	—	—	—	—	—	—	—	1
Malaria ...	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough ...	—	3	2	4	6	—	—	—	—	—	—	19
Measles ...	2	23	37	50	179	10	1	2	—	—	—	343
TOTALS ...	2	34	44	58	212	16	2	7	—	2	1	428

PREVENTION OF BLINDNESS

The Surrey County Council is responsible, in conjunction with the District Welfare Committee, for all matters relating to services provided under Section 29 and Section 30 of the National Assistance Act. Provisions are made for the registration of the blind and for such persons the services of education, home employment, the provision of books, the provision of homes and hostels, and the provision of financial payments are maintained. Much of the work in connection with the blind is carried out by the Surrey Voluntary Association for the Blind in co-operation with the County Council. In addition the Council has extended the services to certain classes of partially sighted persons.

